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Statement of

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Mr. Chairman and Members of the Committee, I am Lieutenant Colonel Thomas J. Miller, Deputy Director of the Michigan State Police. Thank you for the opportunity to testify about the urgent need to promote interoperable communications among and between public safety first responders. On behalf of the Michigan State Police and my colleagues in law enforcement and other first responder agencies across the state, we appreciate the Committee's leadership in addressing this vital issue.

Our first responder capabilities have been tested in recent years as a country—from 9/11 terrorist attacks to the most recent hurricanes. In Michigan our "tests" have included a flood in the Upper Peninsula, civil unrest in Benton Harbor, the blackout of 2003, and most recently mobilizing our Emergency Operations Center in response to Katrina. We have, fortunately, experienced the unexpected and responded well. Still, Michigan, like every other state, faces challenges.

My testimony will describe the interoperability and communications challenges facing the Michigan State Police (MSP) and all of our state's 75,000 first responders. In my 24 years of law enforcement experience, I have come to learn first hand that effective, coordinated, and accessible communications between first responders is critical to the public safety mission.

Michigan has the largest geographically-based public safety communication system in North America. Our Michigan Public Safety Communications System (MPSCS) is a Motorola 800 MHz trunked radio system and is Association of Public Safety Communications Officials (APCO) 25 compliant, providing statewide coverage for public safety users. We have studied, conceived, and built a state of the art digital standards-based interoperable radio system with significant audio capacity and potentially enormous public safety transmission capacity. Since 1995, Michigan taxpayers have invested $221,000,000 in the construction of this statewide

system. The state is currently investing another $19,000,000 in 2006 to upgrade our operating system statewide and to enhance our microwave backbone capacity in Southeast Michigan to accommodate the growth in local users. Governor Granholm has also set an ambitious goal—that by 2008 all first responders will have fully interoperable communications. She has also created an advisory board charged with developing and implementing a plan to achieve this goal.

Michigan has been recognized by the Public Safety Wireless Network (PSWN) and other knowledgeable industry and user groups as visionary in its approach to interoperability. No other state in the union boasts such a system, but even with this success, Michigan still faces critical funding and other challenges in its quest to achieve the required level of public safety communications interoperability.

The Interoperability Challenge in Michigan

On August 17, 1987, Northwest Airlines Flight 255 crashed a mile from Detroit Metropolitan Airport killing 154 of the 155 people on board. Public Safety personnel responding to this disaster site could not communicate effectively with each other, which hampered rescue efforts. Today, 18 years after this incident, our communications capabilities have improved dramatically, however, public safety agencies in our state still lack the necessary equipment to ensure the required level of interoperability and thus a coordinated response.

There are four interrelated challenges facing public safety agencies in Michigan pursuing communications interoperability:

1. **Limited and fragmented funding** – Funding is not available to replace and update equipment; different communities at different levels of government have various funding

schemes and budget priorities. Basically, there are many interests competing for scarce dollars. Stove pipe solutions have tended to be the norm, which has contributed significantly to the interoperability challenges public safety faces in this country today. We do believe that the movement toward the requirement for regionally based solutions to qualify for federal homeland security funds will have a positive impact on communications interoperability. Further federal guidance on jurisdictions working together as well as funding assistance would definitely help move along the goal of interoperability in our country.

2. **Limited and fragmented radio spectrum** – Public safety radio spectrum is a scarce and valuable resource. Exacerbating the situation is that public safety radio spectrum is not contiguous and is scattered throughout the length of the frequency spectrum. Public safety frequencies in Michigan also face geographic limitations due to our shared border with Canada and other states. Additionally, public safety frequencies are under assault from commercial wireless interference. Public safety agencies also compete with each other for scarce radio spectrum, creating significant problems among jurisdictions as they scramble to acquire as many frequencies as they can to meet their own needs. In Michigan, this has created challenges in our efforts to add larger jurisdictions such as the City of Detroit to the state's communication system. The lack of available frequencies in the 800 MHz band in Southeast Michigan has made it difficult to ensure that this region would have the adequate spectrum resources available for the number of users in that geographic area of the state. The bottom line is this impacts public safety.

3. **Limited and fragmented planning coupled with lack of coordination** – Achieving interoperability only works when there is coordination and cooperation. Indeed, the foundation of any effort to achieve interoperability is to create a coherent and

cooperatively developed and shared plan. Currently, public safety agencies are racing to different solutions that exacerbate Michigan's ability, both regionally and on a statewide basis, to meet the interoperability challenge. This is not unique to Michigan, but rather typical across the nation. Effectively partnering with local responders and jurisdictions and breaking down barriers to interoperability is a priority for our state, and must be a priority for our country. Governor Granholm has called for interoperable communications among first responders by 2008 and created the MPSCS Advisory Board this year to develop and implement Michigan's interoperable communications plan and to advise on best practices for implementing interoperability; future trends; and coordination with local, regional, and statewide mutual aid agreements, 9-1-1 dispatch operations, and incident command systems. Again, further focus from the federal government on coordination and shared plans in states and among regions is crucial.

4. **Incompatible and aging communications equipment** – One key challenge with achieving interoperability in Michigan is the age of communications equipment. Many jurisdictions have equipment that is at least 20 years old. Clearly, these instruments are either obsolete or will become obsolete in the near term because manufacturers will no longer support these systems. Additionally, equipment used by various jurisdictions is aging at different stages in their lifecycle, making it difficult to coordinate and collaborate among jurisdictions to acquire common radio infrastructure and equipment. The result is agencies are communicating across different frequencies with different types of radios, analog and digital, using proprietary based systems that tend to inhibit communications interoperability. We need more federal assistance to address this problem, as many local governments just do not have the resources to modernize their systems.

The Need for First Responder Access to 700 MHz Spectrum

Although coordination and planning for interoperability is essential, public safety access to the 700 MHz spectrum, both in Michigan and across the county, is critical for the safety of our citizens and first responders. This issue has become apparent in public safety responses to major incidents that have occurred since the terrorist attacks on September 11, 2001. The 700 MHz band is the only dedicated spectrum allocation where public safety can further develop interoperable voice communications and implement advanced mobile wide area systems that bring high speed access to databases, the internet, imaging and video to first responders out in the field. Congress and the Federal Communications Commission (FCC) allocated 24 MHz of spectrum to public safety in the 700 MHz band in 1997 for additional voice/data capacity, but there are still a small number of TV stations in that spectrum that currently prevent public safety access in most of the major metro areas. Congress must address the loophole in the 1997 legislation that failed to set a firm date when TV stations must vacate this spectrum. Congress needs to enact legislation that mandates such a date without exception. Public safety desperately needs the 700 MHz spectrum today.

While addressing this most critical public safety responder issue, we must not lose sight of the potential impact on citizens who may be dependent on these 700 MHz analog broadcasts for their public information during time of emergency. We urge Congress to fashion an equitable solution to assure that no citizens are left without access to public information during a crisis.

Near-Term Interoperability Initiatives

In addition to our statewide planning for interoperability, Michigan is pursuing several initiatives to address our short term interoperability needs to enhance public safety first response.

1. TACNET - The Michigan State Police is pursuing implementation of a mobile digital-cross band radio repeater system integrated directly into our patrol car electronics. While there are a number of similar technologies, this particular application, offers several unique aspects which have appealed to our officers in pilot tests. Because TACNET is fully integrated into a patrol car's electronic system, patching together as many as five disparate frequency bands is accomplished easily on a touch-screen mounted on the dash. Any patrol officer can do this. While preplanning the frequencies to be coordinated is important, a major advantage of this approach is that we – and other first responders – do not need to acquire new radios or equipment. TACNET simply "controls" existing radio equipment, mounted in the trunk, in a seamless and effective way.

2. The Michigan State Police has been involved in interoperability solutions between the MPSCS and local public safety communication systems since 2000 when the department deployed the first interoperability "patch" with Clinton County, Michigan. Since then, Michigan has deployed patch radios interfacing local radio systems with the MPSCS in 20 counties across Michigan.

3. The Michigan MPSCS and the Ohio MARCS system are involved in a pilot project involving dual programming of MPSCS radios and Ohio MARCS radios for interoperability with the Ohio Highway Patrol, Ohio National Guard, and the Ohio Department of National Resources. In addition, Ohio is installing an MPSCS radio connected to a Raytheon ACU1000 pointed at the Michigan system and interfaced with the Ohio system which will allow communications between Michigan dispatch centers and Michigan units operating in Ohio. Ohio will have the same communications capability with units operating in Michigan. Joint exercises will be conducted with appropriate agencies when this solution is operational.

4. DOJ Cities Project/High Risk Metropolitan Areas – Michigan is finalizing a communications interoperability plan between federal, state, and local authorities in the Detroit Metropolitan area utilizing the MPSCS as the backbone for communications interoperability between law enforcement agencies. This plan also involves the installation of repeaters in Detroit to facilitate communications with other 800 MHZ radio systems (such as Oakland County) who may need to work in Detroit during a major incident.

5. Michigan has developed a microwave link between the MPSCS and the State of Wisconsin for the installation of a telephone "hot line" between the Michigan State Police Negaunee Regional Dispatch Center and Wisconsin State Police Dispatch.

6. Talks are underway with the State of Indiana for an interoperability solution between Indiana's 800 MHZ Motorola trunked system, which is under construction, and the MPSCS.

Conclusion

Communications interoperability for first responders is an important life safety challenge. The Michigan State Police commends the Committee's leadership in addressing this urgent issue. Michigan has been committed to enhancing public safety interoperability prior to the heightened awareness placed on this issue as a result of the terrorist attacks on September 11, 2001. Additional funding and spectrum are key to Michigan and other states reaching our goal of public safety interoperability. And we do urge Congress to assign a date – as soon as possible -- for the spectrum transition so that the 700 MHz bandwidth can be available for public safety use.

Thank you for the opportunity to testify. I would be pleased to answer any questions you may have.